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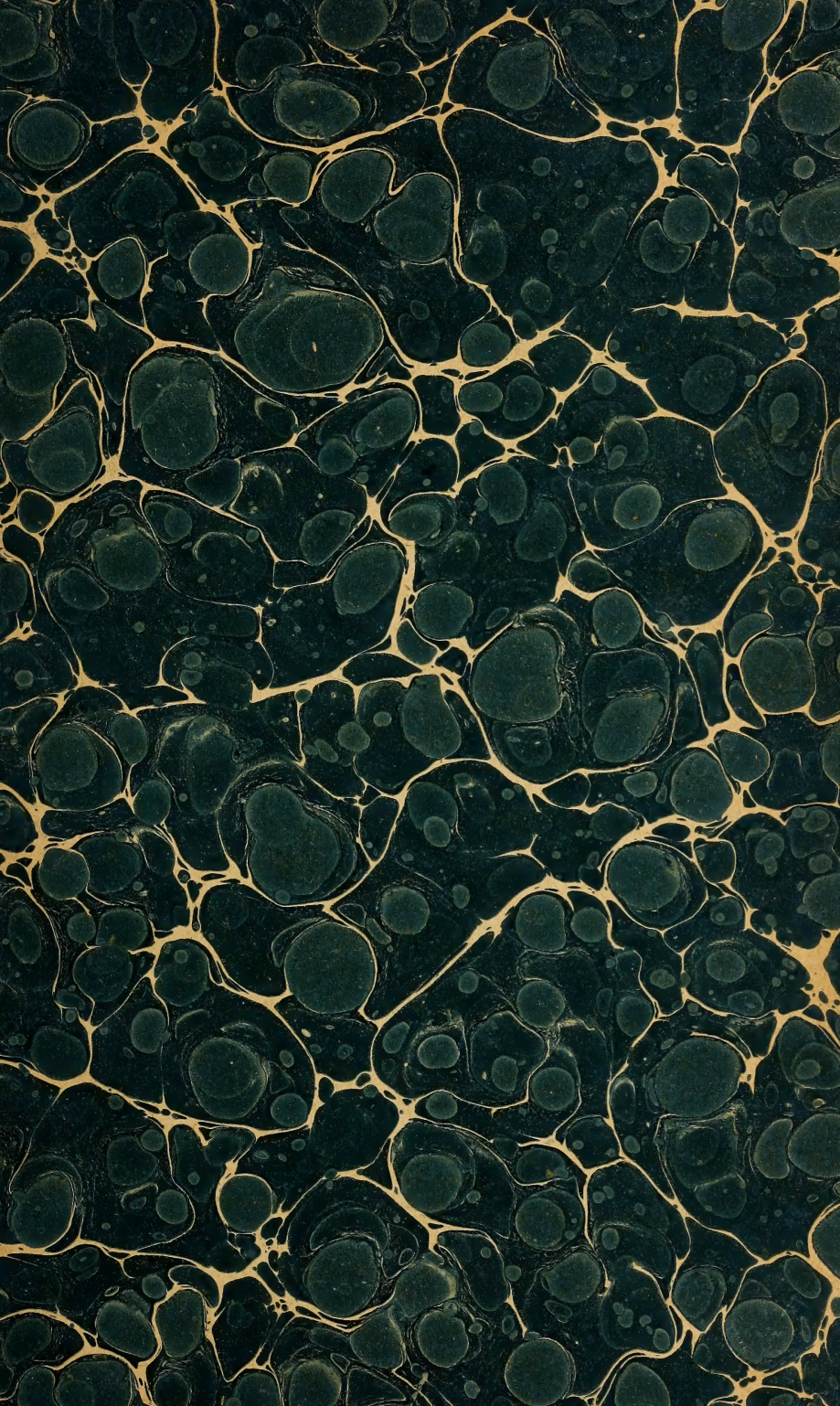
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# United States Department of Agriculture,

## BUREAU OF ENTOMOLOGY,

L. O. HOWARD, Entomologist and Chief of Bureau.

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### LIST OF PUBLICATIONS OF THE BUREAU OF ENTOMOLOGY.

Compiled by MABEL COLCORD, *Librarian.*

There has been a demand from librarians, members of this Bureau, and others interested in entomology for a complete list of the publications of the Bureau and of those of the Département of Agriculture in general bearing on the subject and published by members of the Bureau or under its auspices. To supply this demand the following list has been compiled.

Applications for the priced publications mentioned in this list should be addressed to the Superintendent of Documents, Government Printing Office, Washington, D. C. All remittances should be made payable to him and not to the Department of Agriculture, and should be sent by postal money order or New York exchange. Currency may be sent at sender's risk, but postage stamps, foreign money, and uncertified checks will not be accepted.

The Farmers' Bulletins, circulars, separates, and popular summaries are sent free, on application to the Secretary of Agriculture; but applications from residents of foreign countries, to whom the price of these is 6 cents each, including postage, should be made to the Superintendent of Documents, Government Printing Office, Washington, D. C. No charge is made for postage on documents forwarded to points in the United States, Guam, Hawaii, Philippine Islands, or Porto Rico, nor to Canada, Cuba, or Mexico. To other countries the regular rate of postage is charged, and remittances must cover such postage.

### ANNUAL REPORTS.

[The Division of Entomology was established in 1863, by the appointment of Townend Glover as Entomologist. The annual reports of the Entomologist are bound with those of the Secretary of Agriculture, and for some years have also been issued in independent form, known as author's editions.

Previous to the establishment of the Division, articles of entomological interest appeared in the agricultural reports of the Patent Office. These articles are indexed in "The General Index of the Agricultural Reports of the Patent Office for 1837-1861, and of the Department of Agriculture for 1862-1876." <sup>a</sup>]

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<sup>a</sup>By the Commissioner of Agriculture. Washington: Government Printing Office. 1876. (Now out of print.)



- Report of the Entomologist for 1863. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1863. pp. 561-579.) Out of print.
- Report of the Entomologist for 1864. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1864. pp. 540-564.) Out of print.
- Report of the Entomologist for 1865. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1865. pp. 33-45.) Out of print.
- Report of the Entomologist for 1866. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1866. pp. 27-45.) Out of print.
- Report of the Entomologist for 1867. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1867. pp. 58-76, figs. [16].) Out of print.
- [Report of the Entomologist for 1868.] By Townend Glover. Title: The Food and habits of beetles. (In Annual Report Commissioner of Agriculture for 1868. pp. 78-117, figs. 183.) Out of print.
- Report of the Entomologist for 1869. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1869. pp. 60-64.) Out of print.
- Report of the Entomologist and Curator of the Museum for 1870. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1870. pp. 65-91, figs. 60.) Out of print.
- Report of the Entomologist and Curator of the Museum for 1871. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1871. pp. 69-88, figs. 23.) Out of print.
- Report of the Entomologist and Curator of the Museum for 1872. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1872. pp. 112-138, figs. 26.) Out of print.
- Report of the Entomologist and Curator of the Museum for 1873. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1873. pp. 152-169, figs. 10.) Out of print.
- Report of the Entomologist and Curator of the Museum for 1874. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1874. pp. 122-146, figs. 20.) Out of print.
- Report of the Entomologist for 1875. By Townend Glover. (In Annual report Commissioner of Agriculture for 1875. pp. 114-140, figs. 63.) Out of print.
- Report of the Entomologist and Curator of the Museum for 1876. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1876. pp. 17-46, figs. 59.) Out of print.
- Report of the Entomologist and Curator of the Museum for 1877. By Townend Glover. (In Annual Report Commissioner of Agriculture for 1877. pp. 89-148, pls. I-V.) Out of print.
- Report of the Entomologist, Charles V. Riley, August 22, 1879. pp. 52 + [1], pls. 7. 1879. (Author's edition from the Annual Report of the Department of Agriculture for the year 1878. pp. 207-257, pls. I-VII.) Out of print.
- Report of the Entomologist for 1879. By J. Henry Comstock. (In Annual Report Commissioner of Agriculture for 1879. pp. 185-348, pls. I-XVI.) Out of print.
- Report of the Entomologist for 1880. By J. Henry Comstock. pp. iv + 235-373 + iv, pls. 24. 1881. (Author's edition from the Annual Report of the Department of Agriculture for 1880.) Out of print.
- Report of the Entomologist, Charles V. Riley, for the fiscal year ending June 30, 1882. pp. viii + 167, pls. 20. 1882. (Author's edition from the Annual Report of the Department of Agriculture for the year 1881-[82]. pp. 61-214. pls. I-XX.) Out of print.
- Report of the Entomologist, Charles V. Riley, for the year 1883. pp. v + 99-180 + 5 + [2], pls. 13. 1883. (Author's edition from the Annual Report of the Department of Agriculture for 1883.) Out of print.



- Report of the Entomologist, Charles V. Riley, for the year 1884. pp. vii + [1] + 134 + 2 + ix, pls. 10. 1885. (Author's edition from the Annual Report of the Department of Agriculture for the year 1884.) Out of print.
- Report of the Entomologist, Charles V. Riley, for the year 1885. pp. vii + 1 + 137 + viii + 2, 2 l., pls. 9, 1 map. 1886. (Author's edition from the Annual Report of the Department of Agriculture for the year 1885.) Out of print.
- Report of the Entomologist, Charles V. Riley, for the year 1886. pp. v + 459-592 + ix, pls. 11. 1887. (Author's edition from the Annual Report of the Department of Agriculture for the year 1886.) Out of print.
- Report of the Entomologist, Charles V. Riley, for the year 1887. pp. vi + 48-179 + vi, pls. 8. 1888. (Author's edition from the Annual Report of the Department of Agriculture for the year 1887.) Out of print.
- Report of the Entomologist, Charles V. Riley, for the year 1888. pp. iv + 53-144, pls. 12. 1889. (Author's edition from the Annual Report of the Department of Agriculture for the year 1888.) Out of print.
- Report of the Entomologist for the year 1889. [By C. V. Riley.] pp. iv + 331-361 + iii, pls. 6. [1889?] (Author's edition from the Annual Report of the Department of Agriculture for the year 1889.) Out of print.
- Report of the Entomologist for 1890. By C. V. Riley. pp. 1 + 237-264, pls. I-VII, 1891. (From the Report of the Secretary of Agriculture for 1890.) Out of print.
- Report of the Entomologist for 1891. By C. V. Riley. pp. i-iii + 231-266 + ii, 1892. (From the Report of the Secretary of Agriculture for 1891.) Out of print.
- Report of the Entomologist for 1892. By C. V. Riley. pp. i-iii + 153-180 + ii. pls. I-XII, 1893. (From the Report of the Secretary of Agriculture for 1892.) Out of print.
- Report of the Entomologist for 1893. By C. V. Riley. pp. i-iii + 199-226 + ii, pls. I-IV. (From the Report of the Secretary of Agriculture for 1893.) Out of print.
- Report of the Entomologist for 1894. By L. O. Howard. (In Annual Report Secretary of Agriculture in Message and Documents, 1893-1894. pp. 157-159.) Out of print.
- Report of the Entomologist for 1895. By L. O. Howard. (In Annual Report Secretary of Agriculture in Message and Documents, 1895. pp. 153-157.) Out of print.
- Report of the Entomologist for the fiscal year ending June 30, 1896. By L. O. Howard. pp. i-iii + 89-93. 1896. (From the Report of the Secretary of Agriculture in Message and Documents, 1896.) Out of print.
- Report of the Entomologist for 1897. By L. O. Howard. pp. i-ii + 111-116. 1897. (From the Report of the Secretary of Agriculture, 1897.) Out of print.
- Report of the Entomologist for 1898. By L. O. Howard. pp. i-iii + 17-25. 1898. (From the Report of the Secretary of Agriculture, 1898.) Out of print.
- Report of the Entomologist for 1899. By L. O. Howard. pp. i-iii + 43-52. 1899. (From the Report of the Secretary of Agriculture, 1899.) Out of print.
- Report of the Entomologist for 1900. By L. O. Howard. pp. i-ii + 27-34. 1900. (From Annual Reports Department of Agriculture, 1900.) Out of print.
- Report of the Entomologist for 1901. By L. O. Howard. pp. i-ii + 141-150. 1901. (From Annual Reports Department of Agriculture, 1901.) Out of print.
- Report of the Acting Entomologist for 1902. By C. L. Marlatt. pp. i-iii + 189-207. (From Annual Reports Department of Agriculture, 1902.) Out of print.
- Report of the Entomologist for 1903. By L. O. Howard. pp. i-ii + 227-243. (From Annual Reports Department of Agriculture, 1903.) Out of print.
- Report of the Entomologist for 1904. By L. O. Howard. pp. i-iii + 271-289. (From Annual Reports Department of Agriculture, 1904.) Out of print.
- Report of the Entomologist for 1905. By L. O. Howard. pp. i-ii + 273-302. (From Annual Reports Department of Agriculture, 1905.)



## BULLETINS, OLD SERIES.

- No. 1. Reports of experiments, chiefly with kerosene, upon insects injuriously affecting the orange tree and the cotton plant, made under the direction of the Entomologist. pp. 62. 1883.
- Same*, second edition. pp. 62. 1883. Out of print.
- No. 2. Reports of observations on the Rocky Mountain locust and chinch bug, together with extracts from the correspondence of the Division on miscellaneous insects. pp. 36. 1883.
- Same*, second edition. pp. 36. 1883. Out of print.
- No. 3. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 75, pls. 3. 1883. Out of print.
- No. 4. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist, together with extracts from correspondence on miscellaneous insects. pp. 102, figs. 4. 1884. Out of print.
- No. 5. Descriptions of North American Chalcididae from the collections of the U. S. Department of Agriculture and of Dr. C. V. Riley, with biological notes. [First paper.] Together with a list of the described North American species of the family. By L. O. Howard. pp. 47. 1885. Out of print.
- No. 6. The imported elm leaf-beetle. Its habits and natural history, and means of counteracting its injuries. pp. 18, fig. 1, pl. 1. 1885.
- Same*, second edition. pp. 21, fig. 1, pl. 1. 1891. Out of print.
- No. 7. The Pediculi and Mallophaga affecting man and the lower animals. By Herbert Osborn. pp. 56, figs. 42. 1891. Out of print.
- No. 8. The periodical Cicada. An account of Cicada septendecim and its tredecim race, with a chronology of all the broods known. By Charles V. Riley. pp. 46, figs. 8. 1885.
- Same*, second edition. pp. 46. 1885. Out of print.
- No. 9. The mulberry silk-worm; being a manual of instructions in silk culture. By Charles V. Riley. Sixth revised edition. pp. 65, figs. 29, pls. 2. 1886. (Eds. 1-5 of Bulletin 9 are the same as "Special Report No. 11, Office of the Secretary.")
- Same*, seventh revised edition. pp. vii + 65, figs. 29, pls. 2. 1888. Out of print.
- No. 10. Our shade trees and their insect defoliators. Being a consideration of the four most injurious species which affect the trees of the capital, with means of destroying them. By Charles V. Riley. pp. 75, figs. 27. 1887.
- Same*, second revised edition. pp. 75, figs. 27. 1888. Out of print.
- No. 11. Reports of experiments with various insecticide substances, chiefly upon insects affecting garden crops, made under the direction of the Entomologist. pp. 34. 1886. Out of print.
- No. 12. Miscellaneous notes on the work of the Division of Entomology for the season of 1885, prepared by the Entomologist. pp. 46, pl. 1. 1886. Out of print.
- No. 13. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 78, figs. 4. 1887. Out of print.
- No. 14. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 62, figs. 2, pl. 1. 1887. Out of print.
- No. 15. The Icerya, or fluted scale, otherwise known as the cottony cushion-scale. [Reprint of some recent articles by the Entomologist, and of a report from the agricultural experiment station, University of California.] pp. 40. 1887. Out of print.
- No. 16. The entomological writings of Dr. Alphens Spring Packard. By Samuel Henshaw. pp. 49. 1887. Out of print.



- No. 17. The chinch bug; a general summary of its history, habits, enemies, and of the remedies and preventives to be used against it. By L. O. Howard. pp. 48, figs. 10. 1888. Price 5 cents. Postage 2 cents.
- No. 18. The life and entomological work of the late Townsend Glover. By Charles Richards Dodge. pp. 68, figs. 5, pl. 1. 1888. Out of print.
- No. 19. An enumeration of the published synopses, catalogues, and lists of North American insects; together with other information intended to assist the student of American entomology. By E. A. Schwarz. pp. 77. 1888. Out of print.
- No. 20. The root-knot disease of the peach, orange, and other plants in Florida, due, to the work of *Anguillula*. By J. C. Neal. pp. 31, pls. 21. 1889. Out of print.
- No. 21. Report of a trip to Australia, made under the direction of the Entomologist to investigate the natural enemies of the fluted scale. By Albert Koebele. pp. 32, figs. 16. 1890.
- Same*, revised edition. pp. 32, figs. 16. 1890. Out of print.
- No. 22. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 110, figs. 2. 1890. Out of print.
- No. 23. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 83. 1891. Out of print.
- No. 24. The boll worm of cotton. A report of progress in a supplementary investigation of this insect. By F. W. Mally. pp. 50, figs. 2. 1891. Price 5 cents. Postage 2 cents.
- No. 25. Destructive locusts. A popular consideration of a few of the more injurious locusts (or "grasshoppers") of the United States, together with the best means of destroying them. By C. V. Riley. pp. 62, figs. 11, pls. 12, map 1. 1891. Price 15 cents. Postage 3 cents.
- No. 26. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 95. 1892. Out of print.
- No. 27. Reports on the damage by destructive locusts during the season of 1891, made under the direction of the Entomologist. pp. 64. 1892. Out of print.
- No. 28. The more destructive locusts of America north of Mexico. By Lawrence Bruner. pp. 40, figs. 21. 1893. Out of print.
- No. 29. Report on the boll worm of cotton. By F. W. Mally. pp. 73, pls. 2. 1893. Price 5 cents. Postage 3 cents.
- No. 30. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 67. 1893. Out of print.
- ✓ No. 31. Catalogue of the exhibit of economic entomology at the World's Columbian Exposition, Chicago, Ill., 1893, made under the direction of the Entomologist. pp. 121. 1893. Price 10 cents. Postage 4 cents.
- No. 32. Reports of observations and experiments in the practical work of the Division, made under the direction of the Entomologist. pp. 59. 1894. Out of print.
- No. 33. Legislation against injurious insects; a compilation of the laws and regulations in the United States and British Columbia. By L. O. Howard. pp. 46. 1893. Out of print.

#### BULLETINS, NEW SERIES.

- No. 1. The honey bee: a manual of instruction in apiculture. By Frank Benton. pp. 118, figs. 76, pls. 11. 1896.
- Same*, revised edition. pp. 118, pls. 12. 1896.
- Same*, third edition. pp. 118, pls. 12. 1899. Price 15 cents. Postage 5 cents.
- Same*, 54th Cong., 1st sess., H. Doc. 359, serial No. 3435.

- No. 2. Proceedings of the seventh annual meeting of the Association of Economic Entomologists. pp. 100, fig. 1. 1895. Price 10 cents. Postage 4 cents.
- No. 3. The San Jose scale: its occurrences in the United States, with a full account of its life history and the remedies to be used against it. By L. O. Howard and C. L. Marlatt. pp. 80, figs. 8. 1896. Price 10 cents. Postage 3 cents.
- No. 4. The principal household insects of the United States. By L. O. Howard and C. L. Marlatt. With a chapter on insects affecting dry vegetable foods. By F. H. Chittenden. pp. 130, figs. 64. 1896.
- Same*, revised edition. pp. 131, figs. 64. 1902 [1899]. Price 10 cents. Postage 5 cents.
- No. 5. Insects affecting domestic animals: an account of the species of importance in North America, with mention of related forms occurring on other animals. By Herbert Osborn. pp. 302, figs. 170, pls. 5. 1896. Price 20 cents. Postage 10 cents.
- No. 6. Proceedings of the eighth annual meeting of the Association of Economic Entomologists. pp. 100, figs. 5. 1896. Price 10 cents. Postage 4 cents.
- No. 7. Some miscellaneous results of the work of the Division of Entomology. Prepared under the direction of L. O. Howard, Entomologist. pp. 87, figs. 44. 1897. Price 10 cents. Postage 3 cents.
- No. 8. Some little-known insects affecting stored vegetable products: a collection of articles detailing certain original observations made upon insects of this class. By F. H. Chittenden. pp. 45, figs. 10. 1897. Out of print.
- No. 9. Proceedings of the ninth annual meeting of the Association of Economic Entomologists. pp. 87, figs. 2. 1897. Price 10 cents. Postage 4 cents.
- No. 10. Some miscellaneous results of the work of the Division of Entomology. Prepared under the direction of L. O. Howard, Entomologist. pp. 99, figs. 19. 1898. Price 10 cents. Postage 4 cents.
- No. 11. The gipsy moth in America: a summary account of the introduction and spread of *Porthetria dispar* in Massachusetts and of the efforts made by the State to repress and exterminate it. By L. O. Howard. pp. 39, figs. 8. 1897. Price 5 cents. Postage 2 cents.
- No. 12. The San Jose scale in 1896-1897. By L. O. Howard. pp. 31, fig. 1. 1898. Price 5 cents. Postage 2 cents.
- No. 13. Recent laws against injurious insects in North America, together with the laws relating to foul brood. Compiled by L. O. Howard. pp. 68. 1898. Price 5 cents. Postage 3 cents.
- No. 14. The periodical Cicada: an account of *Cicada septendecim*, its natural enemies, and the means of preventing its injury, together with a summary of the distribution of the different broods. By C. L. Marlatt. pp. 148, figs. 57, pls. 3. 1898. Price 15 cents. Postage 6 cents.
- No. 15. The chinch bug: its probable origin and diffusion, its habits and development, natural checks and remedial and preventive measures, with mention of the habits of an allied European species. By F. M. Webster. pp. 82, figs. 19. 1898. Price 10 cents. Postage 3 cents.
- No. 16. The Hessian fly in the United States. By Herbert Osborn. pp. 57, figs. 8, pls. 2, map 1. 1898. Price 10 cents. Postage 3 cents.
- No. 17. Proceedings of the tenth annual meeting of the Association of Economic Entomologists. pp. 104, figs. 4. 1898. Price 10 cents. Postage 4 cents.
- No. 18. Some miscellaneous results of the work of the Division of Entomology. III. Prepared under the direction of L. O. Howard, Entomologist. pp. 101, figs. 17. 1898. Price 10 cents. Postage 4 cents.
- No. 19. Some insects injurious to garden and orchard crops. A series of articles dealing with insects of this class. By F. H. Chittenden. pp. 99, figs. 20. 1899. Price 10 cents. Postage 4 cents.



- No. 20. Proceedings of the eleventh annual meeting of the Association of Economic Entomologists. pp. 111, figs. 4. 1899. Price 10 cents. Postage 4 cents.
- No. 21. Preliminary report on the insect enemies of forests in the Northwest. An account of the results gained from a reconnaissance trip made in the spring and early summer of 1899. By A. D. Hopkins. pp. 27. 1899. Price 5 cents. Postage 2 cents.
- No. 22. Some miscellaneous results of the work of the Division of Entomology. IV. Prepared under the direction of L. O. Howard, Entomologist. pp. 109, figs. 28. 1900. Price 10 cents. Postage 4 cents.
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- No. 24. A list of works on North American entomology. Compiled . . . by Nathan Banks. pp. 95. 1900. Price 10 cents. Postage 4 cents.
- No. 25. Notes on the mosquitoes of the United States: giving some account of their structure and biology, with remarks on remedies. By L. O. Howard. pp. 70, figs. 22. 1900. Price 10 cents. Postage 3 cents.
- No. 26. Proceedings of the twelfth annual meeting of the Association of Economic Entomologists. pp. 102, pls. 2. 1900. Price 10 cents. Postage 4 cents.
- No. 27. Some insects injurious to the violet, rose, and other ornamental plants. A collection of articles dealing with insects of this class. By F. H. Chittenden. pp. 114, figs. 29, pls. 4. 1901.
- Same*, revised edition. pp. 114, figs. 29, pls. 4. 1901. Price 10 cents. Postage 4 cents.
- No. 28. Insect enemies of spruce in the Northeast. A popular account of results of special investigations, with recommendations for preventing losses. . . . By A. D. Hopkins. pp. 80, figs. 2, pls. 16. 1901. Price 10 cents. Postage 5 cents.
- No. 29. The fall army worm and variegated cutworm. By F. H. Chittenden. pp. 64, figs. 11. 1901. Price 5 cents. Postage 3 cents.
- No. 30. Some miscellaneous results of the work of the Division of Entomology. V. Prepared under the direction of L. O. Howard, Entomologist. pp. 98, figs. 29, pls. 2. 1901. Price 10 cents. Postage 4 cents.
- No. 31. Proceedings of the thirteenth annual meeting of the Association of Economic Entomologists [1901]. pp. 103, figs. 4, pls. 2. 1902. Price 10 cents. Postage 4 cents.
- No. 32. Insect enemies of the pine in the Black Hills Forest Reserve. An account of results of special investigations, with recommendations for preventing losses. By A. D. Hopkins. pp. 24, figs. 5, pls. 7. 1902. Price 10 cents. Postage 2 cents.
- No. 33. Some insects injurious to vegetable crops. A series of articles dealing with insects of this class. By F. H. Chittenden. pp. 117, figs. 30. 1902. Price 10 cents. Postage 4 cents.
- No. 34. The principal insects liable to be distributed on nursery stock. By Nathan Banks. pp. 46, figs. 47. 1902. Price 5 cents. Postage 2 cents.
- No. 35. Report on codling-moth investigations in the Northwest during 1901. By C. B. Simpson. pp. 29, fig. 1, pls. 5. 1902. Price 10 cents. Postage 2 cents.
- No. 36. An index to Bulletins Nos. 1-30 (new series) (1896-1901) of the Division of Entomology. By Nathan Banks. pp. 64. 1902. Price 5 cents. Postage 3 cents.
- No. 37. Proceedings of the fourteenth annual meeting of the Association of Economic Entomologists. pp. 127, figs. 2, pl. 1. 1902. Price 10 cents. Postage 5 cents.
- No. 38. Some miscellaneous results of the work of the Division of Entomology. VI. Prepared under the direction of the Entomologist. pp. 110, figs. 9, pls. 2. 1902. Price 10 cents. Postage 4 cents.
- No. 39. The culture of the mulberry silkworm. By Henrietta Aiken Kelly. pp. 32, figs. 15. 1903. Out of print.

- No. 40. Proceedings of the fifteenth annual meeting of the Association of Economic Entomologists. pp. 124, figs. 6, pls. 2. 1903. Price 10 cents. Postage 5 cents.
- No. 41. The codling moth. By C. B. Simpson. pp. 105, figs. 19, pls. 16. 1903. Price 15 cents. Postage 5 cents.
- No. 42. Some insects attacking the stems of growing wheat, rye, barley, and oats, with methods of prevention and suppression. By F. M. Webster. pp. 62, figs. 15. 1903. Price 5 cents. Postage 3 cents.
- No. 43. A brief account of the principal insect enemies of the sugar beet. By F. H. Chittenden. pp. 71, figs. 65. 1903. Price 5 cents. Postage 3 cents.
- No. 44. Some miscellaneous results of the work of the Division of Entomology. VII. Prepared under the direction of the Entomologist. pp. 99, figs. 19, pl. 1. 1904. Price 10 cents. Postage 4 cents.
- No. 45. The Mexican cotton boll weevil. By W. D. Hunter and W. E. Hinds. pp. 116, figs. 6, pls. 16. 1904. Price 25 cents. Postage 6 cents.
- No. 46. Proceedings of the sixteenth annual meeting of the Association of Economic Entomologists. pp. 113, fig. 1, pls. 2. 1904. Price 10 cents. Postage 4 cents.
- No. 47. Catalogue of the exhibit of economic entomology at the Louisiana Purchase Exposition, St. Louis, Mo., 1904 . . . By E. S. G. Titus and F. C. Pratt. pp. 155. 1904.
- Same*, revised edition. 1904. Price 10 cents. Postage 5 cents.
- No. 48. Catalogue of exhibits of insect enemies of forests and forest products at the Louisiana Purchase Exposition, St. Louis, Mo., 1904. By A. D. Hopkins. pp. 56, pls. 22. 1904. Price 15 cents. Postage 4 cents.
- No. 49. Report on the habits of the kelepe, or Guatemalan cotton-boll-weevil ant. By O. F. Cook. pp. 15. 1904. Price 5 cents. Postage 1 cent.
- No. 50. The cotton bollworm. By A. L. Quaintance and C. T. Brues. pp. 155, figs. 27, pls. 25, map 1. 1905. Price 25 cents. Postage 8 cents.
- No. 51. The Mexican cotton boll weevil: a revision and amplification of Bulletin 45, to include the most important observations made in 1904. By W. D. Hunter and W. E. Hinds. pp. 181, figs. 8, pls. 23. 1905. Price 15 cents. Postage 8 cents.
- Same*, 58th Cong., 3d sess., H. Doc. 383.
- No. 52. Proceedings of the seventeenth annual meeting of the Association of Economic Entomologists. pp. 123, figs. 7, 1905. Price 10 cents. Postage 4 cents.
- No. 53. Catalogue of the exhibit of economic entomology at the Lewis and Clark Centennial Exposition, Portland, Oregon, 1905 . . . By Rolla P. Currie. pp. 127. 1905. Price 10 cents. Postage 5 cents.
- No. 54. Some miscellaneous results of the work of the Bureau of Entomology. VIII. Prepared under the direction of the Entomologist. pp. 99, figs. 20, pls. 4. 1905. Price 10 cents. Postage 4 cents.
- No. 55. The rearing of queen bees. By E. F. Phillips. pp. 32, figs. 17. 1905. Price 5 cents. Postage 2 cents.
- No. 56. The Black Hills beetle, with further notes on its distribution, life history, and methods of control. By A. D. Hopkins. pp. 24, figs. 6, pls. 2. 1905. Price 5 cents. Postage 2 cents.
- No. 57. Report on miscellaneous cotton insects in Texas. By E. Dwight Sanderson. pp. 63, figs. 33, pl. 1. 1906. Price 5 cents. Postage 3 cents.
- No. 58, Part I. Some insects injurious to forests. The locust borer. By A. D. Hopkins. pp. iv + 16, figs. 6, pl. 1. June 13, 1906. Price 5 cents. Postage 1 cent.
- No. 58, Part II. Some insects injurious to forests. The western pine-destroying barkbeetle. By J. L. Webb. pp. vi + 17-30, figs. 7-12, pls. II, III, August 18, 1906. Price 10 cents. Postage 1 cent.
- No. 59. Proliferation as a factor in the natural control of the Mexican cotton boll weevil. By W. E. Hinds. pp. 45, pls. 6. August 27, 1906. Price 15 cents. Postage 2 cents.



## CIRCULARS, FIRST SERIES.

[NOTE.—This series is described as “a miscellaneous and indifferent series, hardly worthy to be entitled to the dignity of being considered publications.” The whole number exceeded 40, nearly all being circular letters, of which Nos. 1, 18, and 22 are the only ones known to exist.]

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No. 5. The carpet beetle or “buffalo moth” (*Anthrenus scrophulariæ* L.). By L. O. Howard. pp. 4, fig. 1. September 8, 1894.

No. 6. The Mexican cotton-boll weevil (*Anthonomus grandis* Boh.). By L. O. Howard. pp. 5, figs. 3. April 2, 1895.

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No. 15. General work against insects which defoliate shade trees in cities and towns. By L. O. Howard. pp. 4. March 6, 1896. (In advance from an article entitled “The shade-tree insect problem in the eastern United States,” to be published in the Yearbook of the Department for 1895.)

No. 16. The larger corn stalk-borer. By L. O. Howard. pp. 3, figs. 3. August 13, 1896.

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- No. 23. The buffalo tree-hopper (*Ceresa bubalus* Fab.). By C. L. Marlatt. pp. 4, figs. 2. May 10, 1897.
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- No. 38. The squash-vine borer (*Melittia saturniiformis* Hbn.). By F. H. Chittenden. pp. 6, figs. 2. April 22, 1899.  
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*Same*, revised edition. pp. 5, figs. 3. March 23, 1905.

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*Same*, second print. pp. 8, figs. 3. [1901.]

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- Bibliography of the more important contributions to American economic entomology. Index to Parts I, II, and III. pp. 1 + 373-454. 1890. Out of print.
- Same*, 51st Cong., 1st sess., H. Mis. Doc. 133; serial No. 2768.
- Bibliography of the more important contributions to American economic entomology. Part IV. By Samuel Henshaw. The more important writings of Government and State entomologists, and of other contributors to the literature of American economic entomology. A-K. pp. 167. 1895. Out of print.
- Bibliography of the more important contributions to American economic entomology. Part V. By Samuel Henshaw. The more important writings of Government and State entomologists, and of other contributors to the literature of American economic entomology. L-Z. pp. 179. 1896. Out of print.
- Bibliography of the more important contributions to American economic entomology. Part VI. The more important writings published between June 30, 1888, and December 30, 1896. Prepared under the direction of the Entomologist, by Nathan Banks, Assistant. pp. 273. 1898. Out of print.
- Bibliography of the more important contributions to American economic entomology. Part VII. The more important writings published between December 31, 1896, and January 1, 1900. Prepared under the direction of the Entomologist, by Nathan Banks, Assistant. pp. 113. 1901. Out of print.
- Bibliography of the more important contributions to American economic entomology. Part VIII. The more important writings published between December 31, 1899, and January 1, 1905. Prepared under the direction of the Entomologist, by Nathan Banks, Assistant Entomologist. pp. 132. 1905. Out of print.

#### UNITED STATES ENTOMOLOGICAL COMMISSION.

[Members of the Commission: C. V. Riley, A. S. Packard, and Cyrus Thomas. The Commission was attached to the United States Geological and Geographical Survey of the Territories, Department of the Interior, until March 3, 1881. The third report of the Commission inaugurated its transfer to the Department of Agriculture.

Of the Bulletins Nos. 1 and 2 were made under direction of the United States Geological and Geographical Survey of the Territories (Hayden): Nos. 3-7 under direction of the Interior Department; none were issued under the Agricultural Department.]

## BULLETINS.

- No. 1. Destruction of the young or unfledged locusts (*Caloptenus spretus*). pp. 12. 1877. Out of print.
- No. 2. On the natural history of the Rocky Mountain locust, and on the habits of the young or unfledged insects as they occur in the more fertile country in which they will hatch the present year. pp. 14, figs. 10, map. 1. 1877. Out of print.
- No. 3. The cotton worm. Summary of its natural history, with an account of its enemies, and the best means of controlling it; being a report of progress of the work of the Commission. By C. V. Riley. pp. 144, figs. 84, pl. 1. 1880. Out of print.
- No. 4. The Hessian fly. Its ravages, habits, enemies, and means of preventing its increase. By A. S. Packard. pp. 43, figs. 1, pls. 2, map 1. 1880. Out of print.
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## REPORTS.

- First annual report, for the year 1877, relating to the Rocky Mountain locust and the best methods of preventing its injuries and of guarding against its invasions, in pursuance of an appropriation made by Congress for this purpose. With maps and illustrations. pp. xvi + 477 + 294, figs. 111, pls. 5, maps 2. 1878. Out of print.
- Second report, for the years 1878 and 1879, relating to the Rocky Mountain locust and the western cricket, and treating of the best means of subduing the locust in its permanent breeding grounds, with a view of preventing its migrations into the more fertile portions of the trans-Mississippi country, in pursuance of appropriations made by Congress for this purpose. With maps and illustrations. pp. xviii + 322 + 80, figs. 10, pls. 17, maps 7. 1880. Out of print.
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- Same*, 48th Cong., 2d sess., H. Mis. Doc. 39, serial No. 2325. Out of print.
- Fifth report, being a revised and enlarged edition of Bulletin No. 7, on Insects injurious to forest and shade trees. By Alpheus S. Packard. pp. viii + 957, figs. 306, pls. 40. 1890. Out of print.
- Same*, 51st Cong., 1st sess., H. Mis. Doc. 269, serial No. 2800.



## INSECT LIFE.

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- Vol. V, Nos. 1-5. September, 1892, to July, 1893. Devoted to the economy and life habits of insects, especially in their relations to agriculture. Edited by C. V. Riley, Entomologist, and L. O. Howard, first assistant, with the assistance of other members of the divisional force. pp. vii + 402, figs. 47, pls. 3. 1893. Out of print.
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- General index to the seven volumes of Insect Life, 1888-1895. pp. 145. 1897. Out of print.

## FARMERS' BULLETINS RELATING TO ENTOMOLOGY.

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- Same*, fourth revised edition. pp. 32. 1898. Out of print. (Superseded by No. 127.)
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[Discontinued June 30, 1891.]

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Approved:

JAMES WILSON,

*Secretary of Agriculture.*

WASHINGTON, D. C., *September 24, 1906.*



